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EXAMINER

PEREZ DAPLE, AARON C

ART UNIT PAPER NUMBER

2154

DATE MAILED: 11/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/817,055

Applicant(s)

MARTIN ET AL.

Examiner

Aaron C Perez-Daple

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Action is in response to Application filed 3/27/01.
2. Claims 1-45 are presented for examination.
3. This Action is non-Final.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. **Claims 8-10, 33-35 and 43-45** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Specifically, claims 8, 33 and 43 recite in line 1 that the host computer is the server. Therefore, claims 1, 26 and 36, from which claims 8, 33 and 43 depend, require outputting and receiving a web request from itself. Although, it follows for a web request to be output to an HTTP interface, since an HTTP interface is used for communicating with the network, it is not clear how to interpret the step of second receiving (e.g. if the web request has already been sent onto the network, then how can it receive the request again from itself?). For the purpose of applying prior art, the Examiner finds that any teaching of processing a web request and generating a web response in a same server is sufficient to meet the limitations of the claims.
7. As dependent claims, claims 9, 10, 34, 35, 44 and 45 suffer from the same deficiencies as claims 8, 33 and 43.

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8. Claims 9, 34 and 44 are further rejected as being indefinite because the claims recite third receiving and third outputting steps which should occur prior to the first receiving and second outputting steps. Based on Fig. 1, it appears that Applicant intends to claim an HTTP interface in the server, wherein web requests and responses pass through the HTTP interface on their way to and from the management resource of the server. Therefore, these steps would actually occur prior to first receiving and second outputting. For the purpose of applying prior art, the Examiner interprets that any teaching of using an HTTP interface to receive requests and output responses is sufficient to meet the limitations of the claims.
9. Claims 10, 35 and 45 are further rejected as being indefinite because it is not clear in what order the steps of fourth outputting and fourth receiving should occur with respect to the other claimed steps. For example, it appears that the step of fourth receiving should occur prior to the step of second outputting in order for the web response to be complete. For the purpose of applying prior art, the Examiner interprets that any teaching of outputting a web request to a host computer for execution and receiving a response from the host computer (at either the server or the client) is sufficient to teach the limitations of the claims.
10. **Claims 19-25** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
11. Specifically, line 5 of claim 19 recites “a corresponding application resource.” It is not clear to what the application resource corresponds. For the purpose of applying prior art, the Examiner interprets that the corresponding application resource corresponds to the host computer. In addition, lines 15-18 recite the step of “outputting to a user.” It is not clear

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which element is being claimed as performing this step. For the purpose of applying prior art, the Examiner interprets that the step of outputting to a user is performed by the web based management resource. In addition, it is not clear whether the “management resource” recited in line 8 is the same as the “web based management server resource” recited in line 12. For the purpose of applying prior art, the Examiner interprets that they may be either the same or different resources. Finally, it is not clear whether the “at least one selected host computer” recited in lines 14-15 is being claimed as the same or a different host from the “one of the host computers” recited in line 12. For the purpose of applying prior art, the Examiner interprets that the “selected” host computer is different from the “one” host computer, because otherwise the one host computer would be required to send web requests to itself.

12. As dependent claims, claims 20-25 suffer from the same deficiencies as claim 19.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. **Claims 1-3, 6-10, 11, 15-20, 25, 26-28, 31-38 and 41-45** are rejected under 35 U.S.C. 103(a) as being unpatentable over Modi et al. (US 6,587,866 B1) (hereinafter Modi) in view of Alteon (Brochure entitled “The Next Step in Server Load Balancing,” Alteon Websystems, San Jose, CA, November 1999.) (hereinafter Alteon)

15. As for claims 1, 26 and 36, Modi teaches a server system and a method in a server for providing web based management of host computers in communication via an open protocol network, the method comprising:

first receiving, from a user, a web-based user request requiring execution of a management operation by at least one selected host computer, each host computer having an application resource for executing corresponding application operations and a management resource for executing the management operation (step 601, Fig. 6; col. 2, line 48 – col. 3, line 13);

first outputting to the at least one selected host computer a web request generated by the server based on executing the web-based user request, the web request specifying a management command for execution of the management operation by the management resource of the at least one selected host computer (step 613, Fig. 6; col. 10, line 47 – col. 11, line 7);

second outputting to the user a web-based user response based on the web response (step 614, Fig. 6; col. 11, lines 8-10).

Although obvious to one of ordinary skill in the art, Modi does not specifically disclose second receiving from the at least one selected host computer a web response that specifies information based on execution of the management operation. Rather, Modi teaches sending the response directly to the user from the host computer. Alton teaches second receiving from the at least one selected host computer a web response that specifies information based on execution of the management operation (Figs. 2 and 3; Overview, pgs. 1-2). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify

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Modi by second receiving from the at least one selected host computer a web response that specifies information based on execution of the management operation in order to provide load-balancing and web-switching capabilities to an internal server cluster, as taught by Alteon (Benefits of Alteon Web Switches, pg. 2).

16. As for claims 2, 27 and 37, Modi teaches the system and method of claims 1, 26 and 36, wherein the first receiving step includes receiving the web-based user request according to hypertext transport (HTTP) protocol (col. 2, line 48 – col. 3, line 13).
17. As for claims 3, 28 and 38, Modi teaches the system and method of claims 2, 27 and 37, further comprising detecting a presence of the host computers on the open protocol network (col. 5, lines 13-26; col. 9, lines 54-64).
18. As for claims 6, 31 and 41, Modi teaches the system and method of claims 5, 30 and 40, wherein the first outputting step further includes specifying at least one of a backup operation, a file transfer operation, and a status report operation as the management operation (col. 2, line 48 – col. 3, line 13; col. 5, lines 13-26).
19. As for claims 7, 32 and 42, Modi teaches the system and method of claims 6, 31 and 41, wherein the second receiving step includes receiving at least one of a backup acknowledgement, a transferred file, and a status report in response to the management operation specifying at least one of a backup operation, a file transfer operation, and a status report operation, respectively (col. 2, line 48 – col. 3, line 13; col. 5, lines 13-26).
20. As for claims 8, 33 and 43, Modi teaches the system and method of claims 2, 27 and 37, wherein the at least one selected host computer is the server and the first outputting step

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includes outputting the web request from the application resource of the server, configured for executing the outputting step to an HTTP interface within the server (col. 6, lines 49-61).

21. As for claims 9, 34 and 44, Modi teaches the system and method of claims 8, 33 and 43, further comprising:

third receiving the web request from the HTTP interface (public interface 221, Fig. 2) by the corresponding management resource of the server (col. 2, line 48 – col. 3, line 13);

executing the management operation specified by the web request by the management resource of the server (col. 2, line 48 – col. 3, line 13); and

third outputting to the HTTP interface the web response that specifies the information based on execution of the management operation (col. 2, line 48 – col. 3, line 13).

22. As for claims 10, 35 and 45, Modi teaches the system and method of claims 9, 34 and 44, further comprising:

generating by the management resource of the server a second web request for execution of a second management operation by at least a second host computer of the open protocol network, the second management operation necessary for execution of the management operation (col. 3, lines 19-38; Fig. 6);

fourth outputting the second web request by the management resource of the server to the at least second host computer (col. 3, lines 19-38; Fig. 6); and

fourth receiving from the at least second host computer a second web response that specifies information based on execution of the second management operation, the web response generated based on the second web response (col. 3, lines 19-38; Fig. 6).

23. As for claim 11, Modi teaches a server configured for providing web based management of host computers in communication via an open protocol network, a server comprising:
- a web based interface (public interface 221, Fig. 2) configured for receiving a web-based user request from a user and outputting a web page, the web based interface configured for outputting a web request to an identified host computer (col. 3, lines 19-38, Fig. 6); and
 - an executable application (HA PDT Server 230, Fig. 2) configured for identifying the identified host computer for execution of a management operation necessary for generating the web page in response to the web-based user request, the executable application generating within the web request an identifier (col. 3, lines 27-30) that specifies execution of the management operation by a management resource within the identified host computer (col. 6, lines 12-24).

Modi does not specifically teach receiving a web response from the identified host computer at the server nor *generating* with the executable application the web page based on results of execution of the management operation specified within the web response. Alteon teaches receiving a web response from the identified host computer (Figs. 2 and 3; Overview, pgs. 1-2) and generating with the executable application the web page based on results of execution of the management operation specified within the web response (pg. 4, paragraphs 6-7). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Modi by receiving a web response from the identified host computer and generating with the executable application at the server the web page based on results of execution of the management operation specified within the web response in order to use

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back-end database servers for more efficiently storing the data, as taught by Alteon (pg. 4, paragraphs 6-7).

24. As for claim 15, Modi discloses the server of claim 11, wherein the executable application specifies within the web request at least one of a backup operation, a file transfer operation, and a status report operation as the management operation (col. 2, line 48 – col. 3, line 13; col. 5, lines 13-26).
25. As for claim 16, Modi discloses the server of claim 11, further comprising a second management resource configured for executing a specified management operation in response to a second web request received by the web based interface, the second management resource configured for outputting to the web based interface a second response that specifies second results of execution of the corresponding specified management operation specified by the second web request (col. 2, line 48 – col. 3, line 13; col. 3, lines 19-38).
26. As for claim 17, Modi discloses the server of claim 16, wherein the identifier in the web request specifies the second management resource executed within the server (col. 3, lines 19-38).
27. As for claim 18, Modi discloses the server of claim 16, wherein the executable application and the second management resource each are configured for selectively responding to an HTTP request received by the web based interface based on a corresponding identifier within the HTTP request (col. 3, lines 19-38).
28. As for claim 19, Modi teaches a system configured for performing distributed computing operations, the system comprising:

a plurality of host computers (server nodes 102-104, Fig. 1) configured for communication via an Internet protocol (IP) network, each host computer including:

(1) a web interface configured for sending and receiving web requests and web responses (public interfaces 220-222),

(2) a corresponding application resource configured for performing corresponding application operations (col. 2, line 48 – col. 3, line 13), and

(3) a management resource (server instances 201-203, Fig. 2) configured for executing prescribed management operations in response to respective web requests received by the corresponding web interface, the management resource configured for outputting a web response that specifies results of execution of a selected management operation in response to a received web request (col. 2, line 48 – col. 3, line 13; col. 3, lines 19-38);

wherein one of the host computers includes a web based management server resource as the corresponding application resource, the web based management server resource configured for generating the web request for execution of the selected management operation by at least one selected host computer in response to reception of a web request from a user (col. 2, line 48 – col. 3, line 13; col. 3, lines 19-38).

Although obvious to one of ordinary skill in the art, Modi does not specifically disclose outputting to the user a web-based user response based on the corresponding web response from the at least one selected host computer, where the selected host computer is different from the one host computer. Rather, Modi teaches sending the response directly to the user from the selected host computer. Alteon teaches outputting to the user a web-based user response based on the corresponding web response from the at least one selected host

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computer (Figs. 2 and 3; Overview, pgs. 1-2). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Modi by outputting to the user a web-based user response based on the corresponding web response from the at least one selected host computer in order to provide load-balancing and web-switching capabilities to an internal server cluster, as taught by Alteon (Benefits of Alteon Web Switches, pg. 2).

29. As for claim 20, Modi teaches the system of claim 19, wherein each web interface is configured for sending and receiving web requests and web responses according to HTTP protocol (col. 2, line 48 – col. 3, line 13).

30. As for claim 25, Modi teaches the system of claim 20, wherein each management resource is configured for generating a second web request to a management resource of another one of the host computers for execution of a second management operation necessary for execution of the corresponding management operation by said each management resource, said another one of the host computers executing the second management operation in response to the second web request and returning to send each management resource a corresponding web response that specifies information based on execution of the second management operation (col. 2, line 48 – col. 3, line 13; col. 3, lines 19-38).

31. **Claims 4, 5, 12-14, 21-24, 29, 30, 39 and 40** are rejected under 35 U.S.C. 103(a) as being obvious over Modi and Alteon in view of Chung et al. (US 6,012,090) (hereinafter Chung) and in further view of Hoyer et al. (US 6,339,750 B1) (hereinafter Hoyer).

32. As for claims 4, 5, 12, 14, 21, 23, 29, 30, 39 and 40, Modi teaches inserting within the web request an identifier specifying execution by the management resource within the at least one selected host computer (col. 3, lines 19-38). Although it is well-known and

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expected in the art, Modi does not specifically disclose using an HTTP post operation for sending and receiving requests. Chung, for example, teaches the use of HTTP post operations for sending and receiving web requests (col. 2, lines 44-63). It would have been obvious to one of ordinary skill in the art to modify Modi and Alteon by using an HTTP post operation for sending and receiving requests in order to provide efficient access to data on a network, as taught by Chung (col. 2, lines 44-63).

Modi further does not specifically disclose specifying the host computers and available management operations for the host computers on the web page output to the user. Hoyer teaches specifying the host computers and available management operations for the host computers on the web page output to the user for the purpose of monitoring system performance (col. 8, lines 17-50). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Modi and Alteon by specifying the host computers and available management operations for the host computers on the web page output to the user in order to monitor system performance, as taught by Hoyer above.

33. As for claim 13, Modi discloses the server of claim 12, further comprising a software resource configured for detecting a presence of the host computers on the open protocol network (col. 5, lines 13-26; col. 9, lines 54-64).
34. As for claim 22, Modi teaches the system of claim 21, wherein the one host computer further includes a software resource configured for detecting a presence of the host computers on the IP network (col. 5, lines 13-26; col. 9, lines 54-64).
35. As for claim 24, Modi teaches system of claim 23, wherein the web based management server specifies within the web request at least one of a backup operation, a file transfer

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operation, and a status report operation as the management operation (col. 2, line 48 – col. 3, line 13; col. 5, lines 13-26).

Conclusion

36. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US 6,351,776 B1, note teaches HTTP post;

US 6,598,077 B2, note server cluster with session management;

US 6,654,796 B1, note abstract;

US 6,714,979 B1, note abstract;

US 6,470,386 B1, note web enabled monitoring system;

US 6,490,620 B1, note web enabled monitoring;

US 6,427,168 B1, note abstract;

EP 0648038 A2, note abstract.


37. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron C Perez-Daple whose telephone number is (703) 305-4897. The examiner can normally be reached on 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (703) 305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published

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applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 10/21/04

Aaron Perez-Daple

